

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO. FILIN		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,893 04/25/2001		04/25/2001	Charles E. Wheatley III	QCPA453B1C1	6708
23696	7590	03/03/2005		EXAMINER	
Qualcom	m Incorpo	orated	VANDERPUYE, KENNETH N		
Patents De 5775 More	epartment ehouse Dri	ve	ART UNIT	PAPER NUMBER	
San Diego	, CA 921	21-1714	2661		
			DATE MAILED: 03/03/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

				(A					
	Applicatio	n No.	Applicant(s)						
Office Action Summary		09/841,893	3	WHEATLEY ET A	L.				
		Examiner		Art Unit					
			Vanderpuye	2661					
The MAILING DATE Period for Reply	of this communication ap	opears on the	cover sheet with the c	orrespondence ad	ldress				
after SIX (6) MONTHS from the m - If the period for reply specified about 1 f NO period for reply is specified a failure to reply within the set or expectation.	FHIS COMMUNICATION le under the provisions of 37 CFR 1 ailing date of this communication. we is less than thirty (30) days, a re bove, the maximum statutory period tended period for reply will, by statuter than three months after the maili	136(a). In no ever ply within the statut d will apply and will tte, cause the applic	ort, however, may a reply be time ory minimum of thirty (30) day, expire SIX (6) MONTHS from cation to become ABANDONE	nely filed s will be considered timel the mailing date of this c D (35 U.S.C. § 133).					
Status									
1) Responsive to com	nunication(s) filed on	<u></u> .							
2a) This action is FINAL									
3) Since this application	n is in condition for allow	ance except f	or formal matters, pro	secution as to the	e merits is				
closed in accordance	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims									
4)⊠ Claim(s) <u>1-58</u> is/are	☑ Claim(s) <u>1-58</u> is/are pending in the application.								
4a) Of the above cla	4a) Of the above claim(s) is/are withdrawn from consideration.								
5) Claim(s) is/a	Claim(s) is/are allowed.								
6)⊠ Claim(s) <u>1-30,33,40</u>	Claim(s) <u>1-30,33,40-49 and 52</u> is/are rejected.								
, ,	☑ Claim(s) <u>31,32,34-39,50,51 and 53-58</u> is/are objected to.								
8) Claim(s) are	8) Claim(s) are subject to restriction and/or election requirement.								
Application Papers									
9) The specification is	objected to by the Examir	ner.							
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.									
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).									
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).									
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.									
Priority under 35 U.S.C. § 1	9								
<u> </u>	c)☐ None of: es of the priority docume	nts have beer	received.						
3. Copies of the	es of the priority documer certified copies of the pri	iority docume	nts have been receive		Stage				
• •	om the International Bure ailed Office action for a lis	,		ed.					
See the attached det	alled Office action for a lis		ed copies not receive	,u.					
Attachment(s)									
 Notice of References Cited (P' Notice of Draftsperson's Pater 			4) Interview Summary Paper No(s)/Mail D						
3) Information Disclosure Statem Paper No(s)/Mail Date		8)	5) Notice of Informal F 6) Other:		O-152)				

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 21-22, 40-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Choate (5,212,804).

With regards to claims 21, 40, Choate teaches an apparatus for synchronizing a base station with a wireless communication comprising: a transmitter(base station transmitter, Fig. 3), a processor communicatively coupled to said transmitter(Base station controller), and a storage medium coupled to said processor(Tape storage) and containing a set of instructions executable(Fig. 11) by said processor to: disable said transmitter(transmitter is disabled during powerup); and obtain initial timing(Fig. 11@345).

With regards to claim 22, 41, Choate teaches the timing signal provided from a base station controller(central processor, Fig. 11@345)

Application/Control Number: 09/841,893

Art Unit: 2661

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 23-25, 42-44 rejected under 35 U.S.C. 103(a) as being unpatentable over Choate.

With regards to the above claims Choate fails to teach alternative sources of the timing signal. Official notice is taken that it is well known in the art that timing can be generated remotely or internally, intermittently to save power or continuously. The selection of each kind is based on design considerations. Hence the selection of a timing source is obvious as a matter of design choice.

Claims 26, 45 rejected under 35 U.S.C. 103(a) as being unpatentable over Choate in view of Abreu et al(6,014,367)

With regards to claims 26, 45, Choate teaches a receiver communicatively coupled to said processor(Fig. 11) and configured to receive signals from a mobile station(aircraft). What Choate fails to teach, is the use of signals received from a mobile station to adjust timing. This is

Art Unit: 2661

taught by Abreau(Abstract). It would have been obvious to one of ordinary skill in the art to combine Choate with Abreu for the purpose of enabling a base station to receive synchronization from a mobile. The motivation being to use a wireless medium as opposed to a wired medium to establish sync.

Claims 27-30, 33, 46-49, 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choate in view of as applied to claims 26, 45 above, and further in view of Scott.(5,745,484).

With regards to claims 27-28, 30, 46-47, 49, Choate and Abreu inherently teach obtaining the mobile identity in order to establish communication. What they both fail to teach is estimating the distance, time delay roundtrip delay etc. Scott teaches roundtrip propagation time as the bases for establishing communication with mobile stations(see abstract). The distance is easily estimated based on the round trip delay time. It would have been obvious to one of ordinary skill in the art to combine Scott with Choate and Abreu for the purpose of adjusting timing based on distance. The motivation being to maintain synchronization.

Claims 29, 48 are rejected as being inherently taught because if the mobile is adjacent to the base station, then delay is not a factor.

Page 5

Art Unit: 2661

Claims 33 and 52 are rejected because although Scott teaches commanding the user to adjust timing, he does not teach transmitting the command at increasing power levels. However since the mobile may be in constant motion away from the base station, it imperative that the base station increase power levels in order for the mobile to be able to receive the command signals. Hence it would have been obvious to one of ordinary skill in the art that increasing power levels ensures that the mobile will continues to adjust its timing clock.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Application/Control Number: 09/841,893

Page 6

Art Unit: 2661

Claims 1-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of U.S. Patent No. 6,307,840. Although the conflicting claims are not identical, they are not patentably distinct from each other because: Claims 2-6, 8-9 are identical to claims 2-8 of '840. However claim 1 of the instant application is a broader version of claim 1 of '840 because what has been omitted is "... communicating information from the first base station to the second base station to assist the second base station in receiving communications from the mobile." It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function same function as before. In re Karlson, 136 USPQ 184(CCPA). Since the function has not been changed claim 1 of the instant application is not patentably distinct from claim 1 of '840.

Claims 11-16, 18-19 are an obvious variation of the method steps in claims 1-6, 8-9 because the apparatus is used to implement the method steps. Hence they are also an obvious variation of claims 1-8 of '084 for the same reasons.

Claims 7, 17 are an obvious variation of claim 6 of '084 because the further away you are from the first base station the closer you are to the second base station. Hence the signal interference is substantially less.

Claims 10, 20 are obvious variation of claims 1,11 because it is inherent that a mobile communicate with a base station based of the round trip delay interval otherwise they would be out of sync.

Allowable Subject Matter

Claims 31-32, 34-39, 50-51, 53-58 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth N Vanderpuye whose telephone number is 571-272-3078. The examiner can normally be reached on M-F(7:30-5:00) Second Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571-272-3126.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KNV 2/26/05 KENNETH VANDERPUYE PRIMARY EXAMINER